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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,779

04/06/2006

Kikuo Maeda

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EXAMINER

YANG, JIE

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

07/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,779	Applicant(s) MAEDA ET AL.	
	Examiner JIE YANG	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-19 is/are pending in the application.
- 4a) Of the above claim(s) 11, 12, and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/22/2009 has been entered.

Status of the Claims

Claim 1 has been amended, claim 6 has been cancelled; claims 11, 12, and 17-19 are withdrawn as non-elected claims; and claims 1-5, 7-10, and 13-16 are active in application.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1-5, 7, 8 and 10, are rejected under 35 U.S.C. 102(b) as being anticipated by Japan patent publication 09-296214, thereafter JP'214 (With machine translation document).

JP'214 is applied to claims 1-5, 7, 8, and 10 for the same reason as stated in the previous office actions marked 1/22/2009 and 7/10/2008.

Regarding the newly added limitation in the instant claim 1, JP'214 teaches "quenching" to obtain a martensitic structure

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(Paragraph [0054]-[0057] of JP'214) and JP'214 specifically teaches martensitic part is fully carried out to below a martensite transformation point and it causes a martensitic transformation (paragraph [0057] of JP'214), which reads on the limitation of quenching process causes a martensitic transformation as recited in the instant claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 13-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'214 in view of Grell et al (US 6,682,227 B2, thereafter, US'227).

JP'214 in view of US'227 is applied to claims 9 and 13-16 for the same reason as stated in the previous office actions marked 1/22/2009 and 7/10/2008.

Response to Arguments

Applicant's arguments filed 4/22/2009 have been fully considered but they are not persuasive.

The Applicant's arguments filed on 4/22/2009 with respect to claims 1-5, 7-10, and 13-16: JP'214 does not identically disclose a manufacturing method of a thin component including all the limitations recited in independent claim 1 because A) with the apparatus of JP'214, it is not possible to heat martensitizing portion 602 after a quenching process and perform a tempering process and if heater 63 at bainitizing portion 601 were used to heat martensitizing portion 602, a bainitic structure of bainitizing portion 601 would be affected adversely, which is contrary to the original purpose of the JP'214 and hence is technically illogical.; B) the word "quenching" in the English-language abstract of the JP'214 does not correspond to the claimed quenching that cause a martensitic structure.

In response, the Examiner disagrees with the Applicant's arguments because JP'214 clearly teaches martensitic part is fully carried out to below a martensite transformation point and it causes a martensitic transformation (paragraph [0057] of JP'214), this is the same "quenching" method as recited in the instant claim 1. JP'214 teaches after carrying out rapid cooling of the processed material, the molding heated material heating and holding to a desired temperature (Paragraph [0021] of JP'214), which reads on the tempering process as recited in the instant claim. At the same time, the non-martensite part of JP'214 may carry out a bainite transformation (claim 1 and paragraph [0021] of JP'214), therefore, the tempering martensite and bainite in JP'214 do not conflict to each other.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jie Yang whose telephone number is 571-2701884.

The examiner can normally be reached on IFP.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-2721244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JY
/Roy King/
Supervisory Patent Examiner, Art Unit 1793